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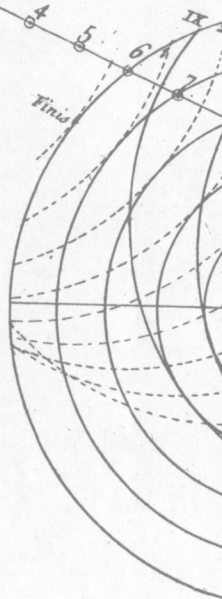
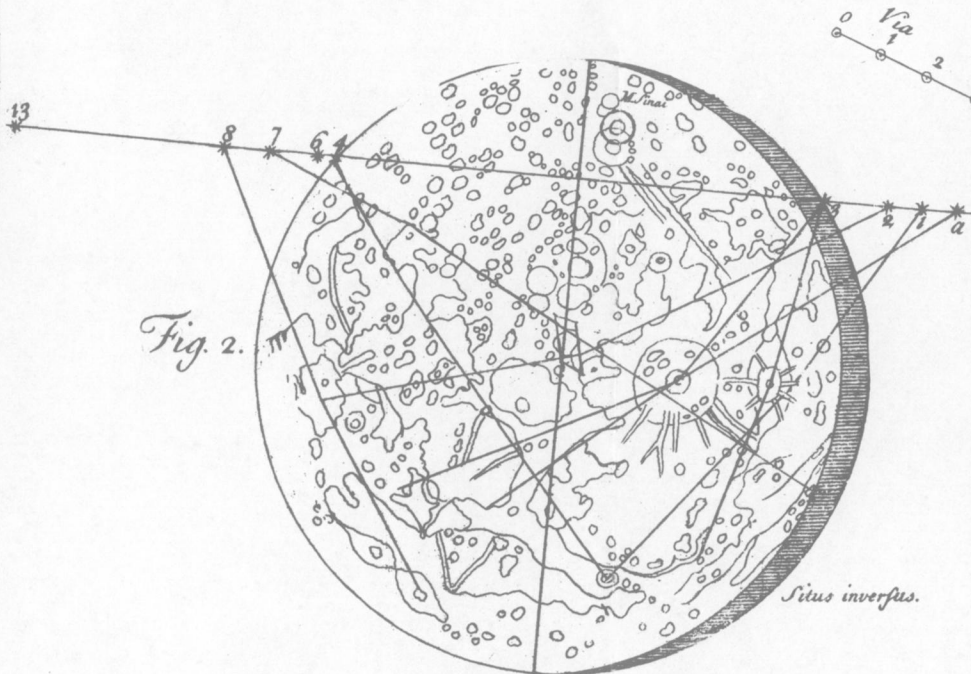
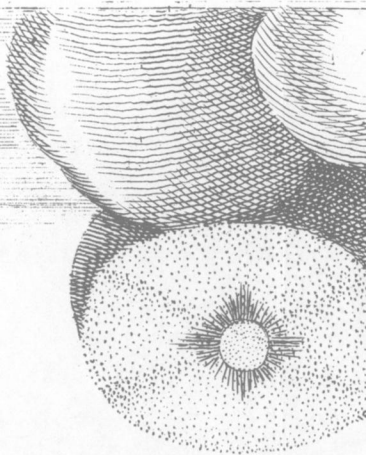
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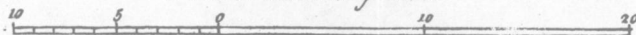
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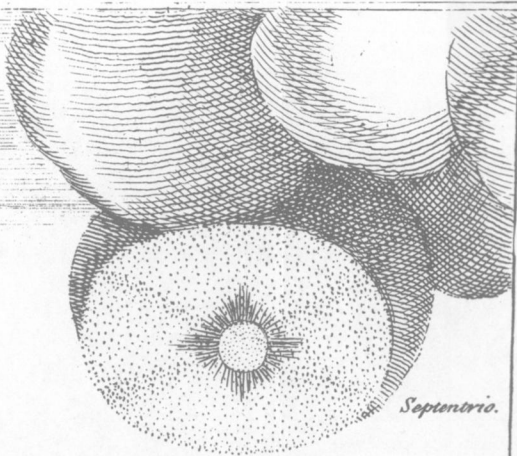


Fig. 1.



Scala Minutorum Gradus.





Septentrio.

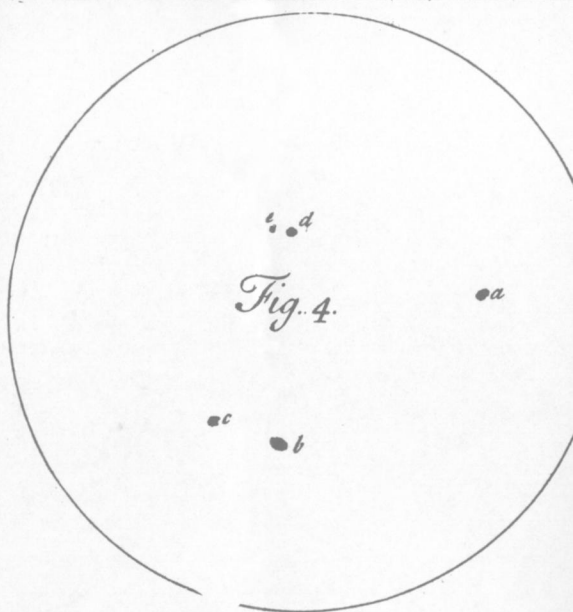
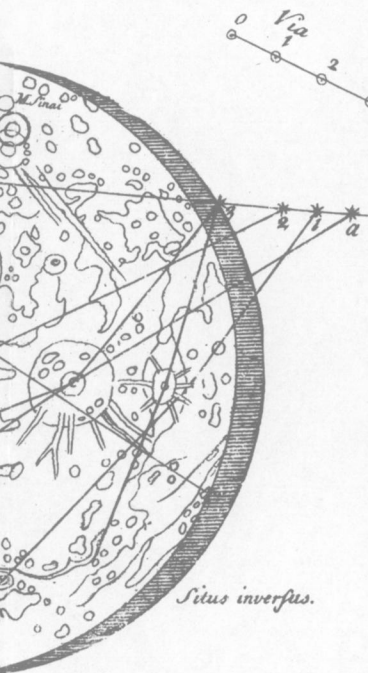


Fig. 4.



Situs inverfus.

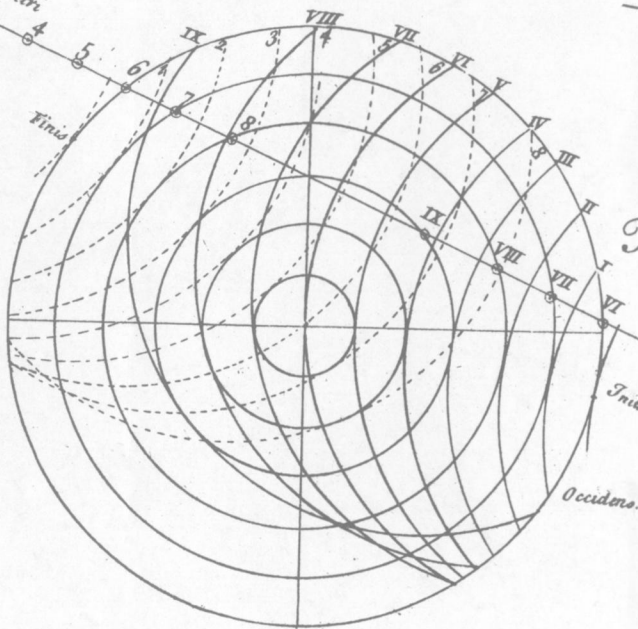


Fig. 3.

Initium.

Occidens.

radus.

10 20

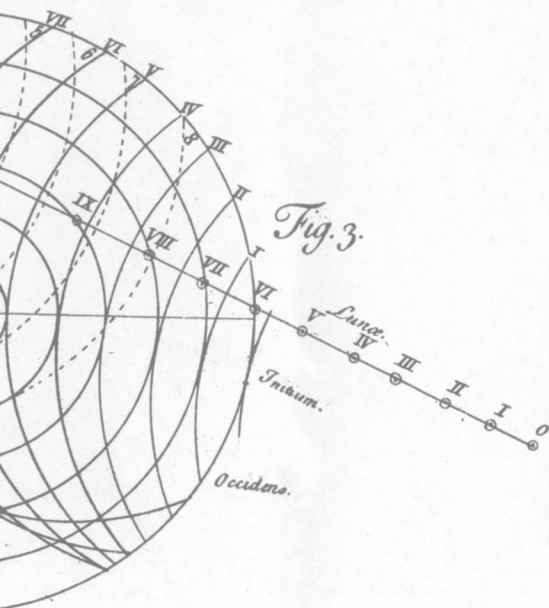
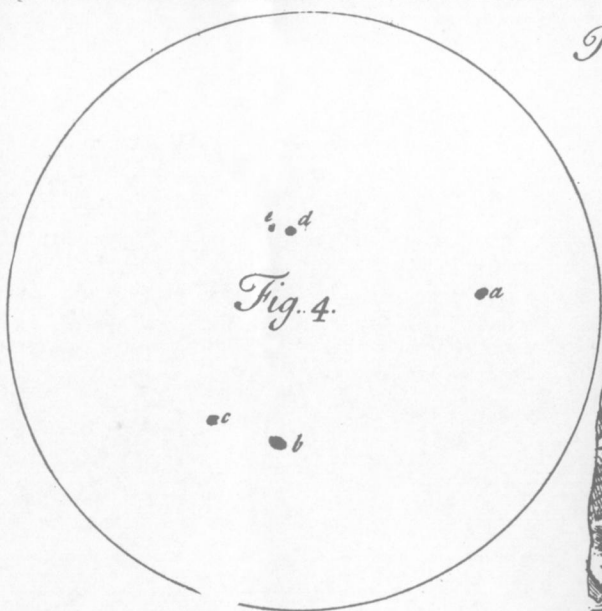


Fig. 5.



XIII. *Occultatio* Palilicii, A. 1738. d 23.  
Decembris *St. N. observata a D. Christ-*  
*fried Kirchio, Astronomo Regio, Berolini. Ex*  
*litteris ad J. F. Weidlerum datis excerpta.*

Tempus horolog. oscillat. H. M. S.		Partes nicrom. Tubo l. ped	Valor partium microm. "	Tempus correc- tum. H. M. S.	Tempus correc- tius. H. M. S.
1 5 56 37	* a centro <i>M. Sinai</i>	38	15 21	6 24 37	
2 5 58 30	* a centro <i>M. Sinai</i>	34	13 42	6 26 30	
3 7 3 54	Immersio stellæ			6 31 54	6 32 00
4 8 5 29	Emersio stellæ tub. 9 ped			7 33 29	7 33 33
5 5 35	Emersio certo facta			7 33 35	
6 6 43	* a centro <i>M. Sinai</i>	36	14 32	34 43	
7 15 32	* a prox. marg. Lunæ	8	3 14	43 32	
8 20	* a <i>M. Sinai</i>	46½	18 47	48	
9 28	Diameter Lunæ vel	74	29 73	56	
		73½	29 41		
		8	3 14	7 57 12	
10 29 12	<i>M. Sinai</i> a prox. marg. ☉	8	3 14	7 57 12	
11 38	Diameter ☽ sub. 9 ped.	99½	29 38	8 6	
12 42	Diameter ☽ sub. 7 ped.	75	30	10	
13 46 55	* a <i>M. Sinai</i>	72	29 5	14 55	
14 8 48	Diameter Lunæ	73½	29 41	8 16	

Vide SCHEMA hujus Occultationis in TAB. II. Fig. 2.

*Situs stellæ respectu macularum lunarium sequenti  
modo observatus.*

I. Ante observationem (1.) h. 6. 20'. notavi stel-  
lam in linea recta a meridionali margine Insulæ  
Macræ (Posidonii) per septentrionalem partem Ponti  
Euxini, (medium maris Serenitatis) & M. Ætnam  
(Copernicum) producta: & linea a M. Sinai ad stel-  
lam fere stringebat littus sinus Sirbonidis. (M. Hu-  
morum).

II. Tempore observationis, (1.) stella erat in linea recta a lacu nigro majore (Platone) per partes orientales insulæ Cercinnæ (a Keplero versus ortum) producta.

III. Tempore observationis (2.) stella in linea per medium Paludis Mæotidis & medium M. Adriatici (per M. Crisum & S. medium) continuata.

IV. Tempore immersionis stellæ, sequentes lineæ rectæ ad illam coincidebant, & locum peripheriæ lunaris, ubi stella occultabatur, designabant.

1. A littore Pontus Euxini (M. Serenitatis) versus Cæciam spectante, per M. Ætnam (Copernicum).
2. A littore sinus Apollinis, per loca paludosa (sc. a littore S. Iridum, per Keplerum).
3. A M. Sinai (Tychone) per littus meridionale S. Sirbonis (M. Humorum).

V. Emergio stellæ contigit e regione M. Paropamisi, (Furnerii) & in linea recta a lacu nigro majore (Platone) per Byzantium (Menelaum) producta, quæ frangebatur sinum extremum Ponti (M. Nectaris).

VI. Tempore observationis (7.) M. Porphyrites, (Aristarchus) margo septentrionalis L. Thespitis (Fracastorii) & stella in linea recta.

VII. Tempore observationis (8.) Lacus Hyperboreus superior (Hermes) medium Paludis Mæotidis (M. Crisii) & stella in linea recta.

*Occultatio Palilicii observata Vitembergæ Saxonum,*  
d. xxiii. Dec. St. N. A. cldcccxxxviii. a Jo.  
Friderico Weidlero, R. S. Lond. S. &c.

Immersio	:	:	:	:	:	:	:	6.	27.	35.
Emersio	.	.	.	.	.	.	.	7.	29.	20.
Duratio	.	.	.	.	.	.	.	I.	I.	45.

# ANNOTATIONES.

1. Observatio a duobus spectatoribus simul perfecta; ego tubo astronomico ix pedum utebar, amicus & socius observationis per telescopium iv pedum lunam contuebatur.

2. Immersio & emersio facta in instanti: uno tamen prope minuto horario citius per longiorem, quam per breviorum tubum animadversa.

3. Appulit stella ad marginem lunæ orientalem, circa gradum 163. schematis lunæ plenæ mobilis Heveliani, Selenographiæ, p. 364. emergebat circa gradum 272. ejusdem schematis. Itaque linea recta, puncta immersionis & emersionis copulans, stringit extrema maris Humorum & Nubium & inter Pitatum & Mare Nubium transit.

Cælum tempore immersionis serenum non erat, sed tenues nubeculæ semper fere ante lunam & stellam oberrabant: ideoque figura stellæ oblonga, diu ante occultationem, per atmosphæræ vapores spectabatur.